AQA

FUNCTIONAL SKILLS
MATHEMATICS LEVEL 2

8362/1 and 2
Report on the Examination

8362
March 2023

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8362/1 - Paper 1

Section A

Question 1 was answered correctly by the majority of students. The most common incorrect answer was 13

In **question 2** over half of the students answered correctly. Many were able to score 1 mark by working out 6×4 first. A common error was thinking 10^2 was 20

Question 3 was generally well answered, with over 60% scoring full marks. Those scoring 1 mark used a correct method but made arithmetic errors. Students not scoring any marks often subtracted from 180 instead of 360 or did not use the right angle in their calculation.

Question 4 differentiated well, with just under 40% of students scoring full marks. Most attempted to use a bus stop method.

Question 5 was very well answered, with over 85% of students achieving the mark. Those that did not score often made errors subtracting 83 from 100

Section B

Question 6   Fudge

Most students were able to make some progress on **part a**, with more than 60% scoring at least 2 marks, usually for working out 50, 75 or 12. Many students stopped at this point, but more than 20% were able to go on to score full marks. All three alternative methods were used, with alternative method 1 being the most successful.

Part b differentiated well, with over 40% scoring full marks, and the full range of responses was seen. Many students worked out that there were 26 milk chocolate covered pieces and gave this as a fraction, but then made errors simplifying. Some incorrectly used 26 as the denominator.

In **part c** the students who used the correct formula for the area of a triangle often went on to score full marks. Many did not know the correct formula, often forgetting to divide by 2, and as such were only able to score a maximum of 2 marks. The full range of responses was seen for this question.

8362/2 - Paper 2

Section A

In **question 1** around 65% of students were able to correctly identify the largest number.

Around half of the students managed to answer **question 2** correctly. The most common incorrect answers were $2\,480\,000$ and $2\,400\,8000$

In **question 3** most students managed to simplify the given ratio, with around 40% going on to simplify fully.

Question 4 was poorly attempted. It was clear that many students did not know how to use the isometric paper. The common incorrect answers consisted or either just a square or a cuboid drawn with the front face made of vertical and horizontal lines.

Question 5 was well answered, with almost 60% of students scoring full marks. The most common error was to write 3% as $\frac{3}{10}$ or 0.3

Many students did not know how to work out density in **question 6** and often incorrectly multiplied the two values.

Q**uestion 7** differentiated well. Some students did not know how to convert to a mixed number and had a final answer of $\frac{9}{8}$ or 1.125 The most common incorrect method was to add the numerators and the denominators.

Section B

Question 8   Running

In **part a** the most common error was to not divide 55 in the ratio 4 : 7, but those that did often went on to score full marks. Many scored 2 marks without using the ratio for $16.2 \times 4 + 5.8 \times 7$ but were then unable to make any further progress.

Part b was poorly answered, with very few students scoring full marks. The majority of students found 30% of 84, so were unable to score any marks on this question. Some scored 1 mark for recognising that the remaining part was 70%

Around three quarters of the students were able to correctly complete the table in **part c**. Most were not able to then work out the probability, with just over only 10% scoring full marks.

Question 9   Buying a house

Part a involved working out the estimated mean from a grouped frequency table. As usual, students found this topic challenging, with over 40% not scoring any marks on this question. Some were able to score 1 mark for correctly stating the midpoints or 2 marks for then multiplying these by the frequency and adding. A common error was to then divide the total by 4

Part b differentiated well, with the full range of marks seen. All alternative methods were seen, with many being able to score 2 marks, but then struggling to use their values to work out the correct percentage.

Part c was generally well attempted, with a full range of marks seen. Most common errors were in working out the numbers of hours, often using 8 hours, and also not writing in money notation for the final answer. Some managed to work out an amount earnt but then were not able to calculate the tax paid.

Question 10   Goats

In **part a** there was a good range of marks scored, with many scoring 1 mark for drawing a square or drawing a shape in the north west corner. Many students had difficultly working out the size of the side length from the given area. The most common error was to assume the scale drawing should have an area of 27 squares.

Part b asked for approximations to be used to estimate a value. The most common error on this question was to not approximate all three values before multiplying. Around half of the students scored one mark for approximating at least one of the values, but only around 5% approximated all three values and went on to score full marks.

Part c had the highest amount of non-attempts on the paper, and over 65% failed to score any marks. Very few students were able to work out the surface area of a cylinder. Around 20% were able to score 1 mark for working out the area of one circle, but many then went on to calculate the volume instead of the surface area.

Question 11   Parcels

The scatter diagram question in **part a** was well attempted, with many students scoring a mark for plotting the two points. As is usually seen on this topic it was common for students to try and answer the question without drawing a line of best fit, which meant that they were only able to access the first mark for plotting points and the final mark for the units.

Part b was well attempted, with over 60% scoring full marks. This was pleasing to see on the final question of the paper. The most common error was to not use the correct order of operations when working out the cost.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results Statistics page of the AQA Website.